

Appl. No. 10/620,880
Amdt. Dated March 25, 2005
Reply to Office Action of October 21, 2004

• • REMARKS/ ARGUMENTS • •

The Official Action of October 21, 2004 has been thoroughly studied. Accordingly, the changes presented herein for the application, considered together with the following remarks, are believed to be sufficient to place the application into condition for allowance.

By the present amendment the Abstract has been changed in accordance with the Examiner's request on page 2 of the Official Action.

Also by the present amendment independent claim 21 has been amended to add the limitations that:

1. the addition reaction type silicone rubber comprises: (A) 100 parts by weight of an alkenyl group-containing organopolysiloxane and (B) such an amount of organohydrogenpolysiloxane having at least 2 H atoms directly bonded to a Si atom in one molecule as to make 0.4 - 5.0 parts of the H atom to one part of the alkenyl group of component (A); and
2. the adhesive component comprising (C) an organosilicone compound having at least one H atom directly bonded to a Si atom.

Support for these additional limitations can be found in the second full paragraph on page 5 of applicants' specification and in the second full paragraph on page 6 of applicants' specification.

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Claims 6 and 7 have been amended herein to recite that the units of hardness of the elastomeric polymer are "Duro A" which is consistent with Japanese Industrial Standard (JIS) K6253 (see reference to JIS K-6253 on page 10 of applicants' specification).

Entry of the changes to the Abstract and claims is respectfully requested.

On page 2 of the Official Action the Examiner has rejected claims 6 and 7 under 35 U.S.C. §112, second paragraph. Under this rejection the Examiner has noted that the hardness values recited in claims 6 and 7 do not include any units.

Claims 6 and 7 have been amended herein to recite that the units of hardness of the elastomeric polymer are "Duro A" which is consistent with Japanese Industrial Standard (JIS) K6253. JIS K6253 was the current known and accepted industrial standard at the time of applicants' invention and is referred to consistently throughout the specification. This standard is well published and known to those skilled in the art.

It is submitted that claims 6 and 7 satisfy the requirements of 35 U.S.C. §112, second paragraph.

Claims 2-9 and 21 are pending in this application.

Claims 21 and 2-5, 8 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,284,403 to Tsurutani et al. in view of JP 10-95071 to Kuse et al.

Claims 6 and 7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Tsurutani et al. in view of Kuse et al. and U.S. Patent No. 5,704,803 to Oshima.

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Claims 21, 2-5, 8 and 9 rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,284,403 to Tsurutani et al. in view of JP 8-148391 to Kuramochi.

Claims 6 and 7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Tsurutani et al. in view of Kuramochi and Oshima.

For the reasons set forth below, it is submitted that all of the pending claims are allowable over the prior art or record and therefore, each of the outstanding prior art rejections should properly be withdrawn.

Favorable reconsideration by the Examiner is earnestly solicited.

The Examiner has relied upon Tsurutani et al. as teaching a gasket for sealing fluids of a fuel cell.

The Examiner concedes that Tsurutani et al. fails to teach the use of an additive type reaction silicone rubber as the gasket material.

The Examiner has relied upon Kuse et al. as teaching: "that silicone rubber has outstanding heat resistance and cushioning properties in paragraph [0002], and paragraphs [0008-0010] teach an additive type silicone rubber."

The Examiner has relied upon Kuramochi as teaching: "that silicone rubber has outstanding heat resistance and cushioning properties in paragraph [0038-0039], which teach an additive type silicone rubber for improved adhesive."

The Examiner has taken the position that it would have been obvious to combine the teachings of Tsurutani et al. and Kuse et al. by using the additive silicone rubber of Kuse et al. as the

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rubber component of the gasket of Tsurutani et al. "in order to obtain a heat resistant and compressible flexible gasket that provides excellent sealing properties when combined with a resin film for strength."

Kuse et al. does not include any teaching as to electrolytes or any particular advantage of using the additive silicone rubber as a gasket component in an electrolyte environment.

The "outstanding heat resistance and cushioning properties" of the additive silicone rubber of Kuse et al. that the Examiner specifically relies upon are deemed to be properties that are associated with many silicone based rubber compositions - not all of which would be applicable for use in environments that include electrolytes because of the type of contamination discussed on page 2 of applicants' specification.

Absent any reference to or teaching of electrolytes or electrolyte solutions, it cannot be said that Kuse et al. teaches or even suggests a rubber composition that is suitable for used as a gasket component that can be in contact with an electrolyte solution. Moreover, Kuse et al. does not does not provide any teaching that is at all related to Tsurutani et al.

Accordingly, it is respectfully submitted that there is insufficient basis to conclude that the Examiner's proposed combination of Tsurutani et al. and Kuse et al. is obvious under 35 U.S.C. §103.

Note, in *Sernaker*, the CAFC held that:

In order for a combination of references to render an invention obvious, the combination of the teachings of all or any of the references must suggest, expressly or by implication, the possibility of achieving further improvement by combining such teachings along the line of the invention, and that prior art references in combination

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do not make an invention obvious unless something in the prior art references would suggest the advantage to be derived from combining their teachings. *In re Sernaker*, 217 USPQ 1 (CAFC 1983) (underlying added)

In the present situation, the teachings of Tsurutani et al. and Kuse et al. alone or in combination do not teach or suggest any benefit or improvement that could be gained by combining the teachings of these references in the manner proposed by the Examiner. Most likely it is applicants' own disclosure that motivated the Examiner's attempts to combine the teachings of Tsurutani et al. and Kuse et al. It is not even clear from the teachings of Tsurutani et al. and Kuse et al. that a silicon rubber having a "outstanding heat resistance" is at all necessary in the fuel cell of Tsurutani et al.

Kuramochi is directed to a "sealing rubber of an aluminum electrolyte capacitor" as recited in the title.

In paragraph [0002] Kuramochi teaches three characteristic that are "mainly demanded" of the sealing rubber. These include that the sealing rubber not corrode aluminum.

Tsurutani et al. teaches a non-aqueous electrolyte storage battery that is provided with a cap having a pressure relieve mechanism that relieve pressure that can build up within the sealed battery. The battery includes a case 7 made of an undisclosed material that has a resin gasket liner therein.

There is no particular motivation found within the teachings of Tsurutani et al. and Kuramochi to use the rubber compositions of Kuramochi in the battery of Tsurutani et al.

Kuramochi specifically teaches a gasket that is made of nylon film and a silicone rubber SH-881U produced by Toray Dow Corning which adheres to the nylon film in paragraph [0038].

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The silicone rubber used in the present invention has a chemical structure that is different from the teachings of the prior art.

The difference in chemical structure is reflected in the limitations that have been added into independent claim 1 by the present amendment which include the recitation that the addition reaction type silicone rubber comprises: (A) 100 parts by weight of an alkenyl group-containing organopolysiloxane and (B) such an amount of organohydrogenpolysiloxane having at least 2 H atoms directly bonded to a Si atom in one molecule as to make 0.4 - 5.0 parts of the H atom to one part of the alkenyl group of component (A). And the recitation that the adhesive component comprising (C) an organosilicone compound having at least one H atom directly bonded to a Si atom.

Neither Kuse et al. or Kuramochi teaches this specific reaction type silicone rubber composition which applicants alone have discovered has particular use as a gasket material in fuel cells, secondary batteries, condensers, etc. because this composition does not contaminate electrolyte solutions and otherwise exhibits excellent adhesiveness between the rubber and resin of gasket elements and good compression set characteristics.

The prior art of record does not teach applicants' claimed addition reaction type silicone rubber compositions nor the advantages of their use as gasket elements in systems in which they are exposed to electrolytes.

The Examiner's further reliance upon Oshima as silicone rubber with a Shore A hardness of 10-70 does not address or overcome the distinctions between the present invention and the primary and secondary references discussed above.

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Based upon the above distinctions between the prior art relied upon by the Examiner and the present invention, and the overall teachings of prior art, properly considered as a whole, it is respectfully submitted that the Examiner cannot rely upon the prior art as required under 35 U.S.C. §103 to establish a *prima facie* case of obviousness of applicants claimed invention.

It is, therefore, submitted that any reliance upon prior art would be improper inasmuch as the prior art does not remotely anticipate, teach, suggest or render obvious the present invention.

It is submitted that the claims, as now amended, and the discussion contained herein clearly show that the claimed invention is novel and neither anticipated nor obvious over the teachings of the prior art and the outstanding rejection of the claims should hence be withdrawn.

Therefore, reconsideration and withdrawal of the outstanding rejection of the claims and an early allowance of the claims is believed to be in order.

It is believed that the above represents a complete response to the Official Action and reconsideration is requested.

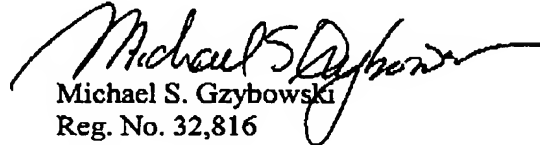
If upon consideration of the above, the Examiner should feel that there remain outstanding issues in the present application that could be resolved, the Examiner is invited to contact applicants' patent counsel at the telephone number given below to discuss such issues.

To the extent necessary, a petition for an extension of time under 37 CFR §1.136 is hereby made. Please charge the fees due in connection with the filing of this paper, including extension of

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time fees, to Deposit Account No. 12-2136 and please credit any excess fees to such deposit account.

Respectfully submitted,


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